

Serial No.: 10/564,987

PF030118

Remarks

In view of the above amendments to the claims and the following discussion, the applicants submit that the claims now pending in the application are not obvious under the provisions of 35 U. S. C. § 103. Thus, the applicants believe that all of these claims are in allowable form.

OATH/DECLARATION

The Examiner indicates that the declaration is defective. In particular, the Examiner indicates that the declaration does not identify the city and foreign country of residence for each inventor. Applicants have provided with this paper an Application Data Sheet which details the city and foreign country of residence for each inventor. In view of the Application Data Sheet, the basis for the Examiner's objection to the declaration has been removed. Therefore, it is respectfully requested that the Examiner's objection to the declaration be withdrawn.

OBJECTIONS**A. Abstract**

The Examiner objects to the Abstract because at line 1, the phrase "The invention relates to" is not clear. Applicants have amended the Abstract to replace the phrase "The invention relates to" with "An illuminating device is described ". In view of this amendment to the Abstract, the basis for the Examiner's objection thereto has been removed. Therefore, it is respectfully requested that the Examiner's objection to the Abstract be withdrawn.

Serial No.: 10/564,987

PF030118

B. Specification

The Examiner objects to the specification because no headings were provided in the specification. Applicants have amended the specification to insert appropriate headings throughout. In view of this amendment to the specification, the basis for the Examiner's objection thereto has been removed. As such, it is respectfully requested that this objection be withdrawn.

C. Claims

Claims 11-13 are objected to for improper antecedent basis for the phrases "the non-right angles" and "the divergence of said light beam", respectively. Claims 11-12 have been amended to provide proper antecedent basis for the phrases "the non-right angles" and "the divergence of said light beam", respectively. In view of these amendments to claims 11-12, the basis for the Examiner's objection thereto has been removed. As such, it is respectfully requested that this objection be withdrawn.

REJECTIONS**A. 35 U. S. C. § 103**

1. Claims 10-13 and 15-17 are not obvious over Esaki et al. in view of Lu and further in view of Wu et al.

Claims 10-13 and 15-17 stand rejected under 35 U. S. C. § 103(a) as being unpatentable over Esaki et al. (U. S. Patent 5,716,122 issued February 10, 1998) in view of Lu (U. S. Application Publication 2004/0160578 published August 14, 2004) and further in view of Wu et al. (U. S. Patent 6,049,404 issued

Serial No.: 10/564,987

PF030118

April 11, 2000). Applicants submit that these claims are not rendered obvious by the combination of these references.

Claims 10-13 and 15-17 are directed to illuminating device comprising a polarization rotator device associated with only one exit face of first and second prisms 1, 2, a light integrating device of a "rod" type 7, and a spatial light modulator 8 of a liquid crystal type (*see*, specification at FIG. 3 and page 8, line 37 to page 9, line 3). The light integrating device has an entry face that is optically coupled to said second exit faces of the prisms and that, receiving the beams reflected by the third faces of the prisms, delivers a beam through an exit face whose illumination is substantially homogeneous over this face and that allows said spatial light modulator to be illuminated in a uniform manner (*see*, specification at page 9, lines 4-9). The polarizing beam splitter comprises a grid polarizer situated between the first faces of the first and of the second prism (*see*, specification at page 3, lines 22-25).

Esaki et al. does not describe or suggest an illuminating device including a **polarization rotator** device is associated with only one of said second exit faces of the prisms, so that the integration of light coming from the two exit faces of the prisms is specifically important "to allows the spatial light modulator to be illuminated in a uniform manner", by "mixing" the light coming from one of said second exit faces of the prisms with the light coming from the other of said second exit faces of the prisms, these two lights having the same polarization. Rather, Esaki et al. only teaches that the spatial light modulator is directly illuminated by the beams exiting the two faces of the prisms. As such, claims 10-13 and 15-17 are patentable over Esaki et al.

Lu does not describe or suggest an illuminating device including a **polarization rotator** device is associated with only one of said second exit faces of the prisms, so that the integration of light coming from the two exit faces of the prisms is specifically important "to allows the spatial light modulator to be illuminated in a uniform manner", by "mixing" the light coming from one of said second exit faces of the prisms with the light coming from the other of said

Serial No.: 10/564,987

PF030118

second exit faces of the prisms, these two lights having the same polarization. Rather, Lu only describes a grid polarizer between the first faces of two prisms of a polarizing beam splitter.

Wu et al. does not describe or suggest an illuminating device including a **polarization rotator** device is associated with only one of said second exit faces of the prisms, so that the integration of light coming from the two exit faces of the prisms is specifically important "to allows the spatial light modulator to be illuminated in a uniform manner", by "mixing" the light coming from one of said second exit faces of the prisms with the light coming from the other of said second exit faces of the prisms, these two lights having the same polarization. Rather, Wu et al. only discloses a **polarization rotator associated with only one of the second exit faces of the prisms**.

Further, Esaki et al. teaches throughout that there is no need for a polarization rotator between the prisms and the spatial light modulator. Further, since Wu et al. only discloses a **polarization rotator associated with only one of the second exit faces of the prisms**, even if combined with Esaki et al. and Lu, applicants' invention as recited in claims 10-13 and 15-17 is still patentable over these references.

CONCLUSION

Thus, the applicants submit that none of the claims presently in the application are obvious under the provisions of 35 U. S. C. § 103. Consequently, the applicants believe that all of the claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring continuation of the adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Ms.

Serial No.: 10/564,987

PF030118

Patricia A. Verlangieri, at (609) 734-6867, so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,



Patricia A. Verlangieri
Reg. No. 42,201
(609) 734-6867

Thomson Licensing
P. O. Box 5312
Princeton, New Jersey 08543-5312

August 27, 2008